many Bear-like features in its organisation. The feet., for instance, were plantigrade and five-toed. The ulna and the radius are specially compared with the same bones in the Bear tribe. The skull on the other hand is as distinctly Dog-like in form. The molars are large, broad, and crushing, and Bear-like. The largest known species, *A. giganteus,* is of about the size of the Brown Bear. *jLwiph'icyo'n,* is a Miocene genus. Eocene and allied to it is *PseudampMcyon.* This genus has, like *A.mp?iicyon,* the complete dentition of forty-four teeth. In the Amphicyoninae generally the feet are five-toed, the humerus has an entepi-condylar foramen and the femur a third trochanter. The upper molars are large.

The closely allied and American genus *Daphaenus* has also plantigrade feet, and has in its structure many reminiscences of the Creodonts. So, too, has the Eocene *ITintacyon**

Cynodestnus is closely allied to *Cynodictis.* It has ancient features combined with quite modern ones. The skull is described as being Creodont-like, but the dentition is that of the microdont modern Dogs. In accordance with its age the cerebral convolutions of this Dog are much simpler than in existing Dogs, and the hemispheres do not cover the cerebellum so much.

The Bear-like Oarnivora or Arctoidea.—That division of the Carnivora which is typically represented by the Bears em-braces three recent families, which are united by a number of characters. These Carnivora are always plantigrade or nearly so. They have nearly always five toes. The claws are not retractile, or at most semi-retractile as

in the Panda. In the skull the tympanic bulla is often depressed, and is not so globular and obvious as in the Cats. Its cavity is not divided by a septum.
The paroccipital processes are not applied to it. The carnassial tooth is less emphasised in this group than in the Cats.

These characters, however., have to be used with caution, as they are hardly universally applicable. A fairly typical Arctoid
bulla is seen in such a form as *Cercoleptes.* The bulla itself is a little more swollen than in *Ursus,* but it is flattened off in the
same way towards the bony meatus. The paroccipital processes,
slightly developed, are at a distance of J~inch from the posterior
margin of the bulla. In the Baccoon the bullae are much more
swoHesi, and the paroccipital processes are closer to them. In
•fete Marbled Polecat, *Futorius sarmctticus,* the bullae are fairly